

9554.1994(06)

DETERMINATION OF EQUIVALENT TREATMENT (DET) FOR 8 OF THE  
WASTE CODES FROM A TOLUENE DIISOCYANATE (TDI)

United States Environmental Protection Agency  
Washington, D.C. 20460  
Office of Solid Waste and Emergency Response

October 24, 1994

Mr. Eugene Berman  
Vice President of Regulatory and Community Affairs  
Molten Metal Technology, Inc.  
51 Sawyer Road  
Waltham, Massachusetts 02154

Dear Mr. Berman:

EPA has reviewed your request for a "determination of equivalent treatment" (DET) as authorized by 40 CFR 268.42(b) for 8 of the waste codes from the toluene diisocyanate (TDI) treatability group for which incineration (INCIN) or combustion (CMBST) was specified as BDAT. Based on the information provided in your application dated April 22, 1994, and conversations between your staff and mine, we have determined that the proposed treatment of Catalytic Extraction Processing (CEP) and compliance with the Universal Treatment Standards (UTS) for metals (as specified in the Enclosure), would provide equivalent treatment to that of the promulgated standards for eight of the waste codes (Nonwastewater forms of K027, K112, K113, K114, K115, K116, U221, and U223). The other waste code specified in your request letter, K111, has a treatment standard expressed as a maximum constituent concentration rather than a specified technology. As such, a determination of equivalent treatment is not applicable for this waste.

The enclosed determination includes a list of specific facilities for which this Determination of Equivalent Treatment applies. Additional sites may also be covered by a DET if CEP is expected to be commercially deployed at other sites and MMT requests a DET.

Enclosed you will find our determination on your request. If you need further assistance, please contact Richard Kinch, Chief, Waste Treatment Branch (703-308-8434).

RO 13708

Sincerely,

Michael Shapiro, Director  
Office of Solid Waste

Enclosure

cc: Jim Thompson, OWPE

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Attachment  
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## REQUEST FOR OMB REVIEW

Title: Land Disposal Restrictions - Phase III: Decharacterized Wastewaters, Carbamate and Organobromine Wastes, and Spent Potliners; Proposed Rule.

### Background

Pursuant to the Hazardous and Solid Waste Amendments of 1984, EPA is required to set treatment standards for wastes identified or listed as hazardous. Wastes must meet the treatment standards before they can be disposed on land. By setting standards for the newly listed hazardous wastes addressed in this rule--organobromine, carbamate, and spent potliner from aluminum production -- ("Phase III"), we will fulfill some of the requirements of a proposed consent decree (the "megadeadline" settlement agreement) with the Environmental Defense Fund (EDF). Under the consent decree, EPA is required to propose this rule by January 17, 1995. Phase III also meets some of the obligations of a subsequent settlement agreement by proposing treatment standards for characteristic hazardous wastes that are diluted to remove the characteristic (decharacterized) and placed in a wastewater treatment system surface impoundment regulated under the Clean Water Act (CWA) or equivalent, or into Class I nonhazardous injection wells regulated under the Safe Drinking Water Act (SDWA). The treatment standards that are being proposed would apply at the point of discharge from the surface impoundment into waters of the U.S. (or in the case of a zero discharger, at the point the wastewater is sprayed or otherwise placed on the land), and at the point the waste is injected into the Class I nonhazardous waste (also referred to as "end-of-pipe"). This approach is modelled after that taken in two previous LDR rules (the emergency interim final rule and the Phase III final rule) to address the decision of the U.S. Circuit in *Chemical Waste Management v. EPA*, 976 F. 2d 2 (D.C. Cir. 1992), cert. denied 113 s.ct. 1961(1993)(*CWM v. EPA*)).

### Description of the Rule

Phase III proposes treatment standards for 80 newly listed carbamate wastes and two organobromine wastes named in the proposed consent decree with EDF. Treatment standards are also

being proposed ahead of the schedule set out in the consent decree for spent aluminum potliners (scheduled for proposal in Phase IV in June, 1995).

EPA is also proposing that decharacterized wastes managed in CWA or CWA equivalent wastewater treatment surface impoundments must be treated to address any underlying hazardous constituents reasonably expected to be present, before the effluent is released into waters of the U.S. or land disposed (end-of-pipe). The treatment standards being proposed are the "universal treatment standards" (UTS) that were promulgated in the July 29, 1994 Phase II LDR rule. Because many of these waste management facilities are regulated under the CWA, EPA is proposing to integrate implementation of the RCRA treatment standards by deferring, whenever possible, to CWA limits. The regional or state permit writer may regulate the RCRA constituents under the facility's CWA permit: If the CWA permit regulates the RCRA constituents, then enforcement would be carried out under CWA exclusively, thereby using less regional or state resources. If, however, the CWA permit writer does not regulate the applicable RCRA constituents, then enforcement would have to be carried out by both CWA and RCRA personnel, at a greater resource cost.

Decharacterized wastes that were previously allowed to be injected into Class I nonhazardous waste wells must now be treated to address any underlying hazardous constituents reasonably expected to be present, prior to injection into the well. Or as an alternative, such units could apply for a variance based on a finding that hazardous constituents will not migrate from the unit for as long as the waste remains hazardous. If the so called "no migration" variance is granted by EPA, then untreated hazardous wastes can legally be placed in the unit.

Because the proposed requirements include treating underlying hazardous constituents that have not been previously regulated in CWA, CWA-equivalent, and SDWA Class I nonhazardous systems, such facilities will incur significant new waste management costs. In order to minimize impacts to the extent possible within the confines of the court decision, the Agency is proposing two mechanisms that should reduce costs and paperwork burden for de minimis wastestreams, and mass reductions in hazardous constituents made through pollution prevention for wastes going to deep well injection.

In addition, EPA is proposing several actions in Phase III to streamline the LDR program. EPA is also proposing to clarify certain regulatory definitions to provide consistency with the universal treatment standards. Furthermore, comments are solicited on additional streamlining mechanisms for LDR paperwork.

### Anticipated Reactions

OMB. OMB may again object to the Phase III proposed rule on the grounds that costs of compliance are high, considering the low measurable environmental and health benefits. The Agency, however, is compelled by statute to set standards for these newly listed wastes, and is obligated under the 1992 court decision to establish treatment standards for CWA, CWA-equivalent, and SDWA Class I nonhazardous injection wells.

Others. The regulated community is expected to object to the end-of-pipe treatment standards because of the dual statutory controls proposed to be imposed on these wastewater treatment systems and injection wells, and because of new compliance costs. As to the levels of those standards, the regulated community favors the universal treatment standards but may prefer that they be based on risk rather than technology performance. They will generally support the de minimis concept, but may prefer more wastes be included. They will likely support the pollution prevention provisions and other initiatives to simplify the LDR rules. Also, they will likely support integration of RCRA with CWA implementation.

Certain environmental groups should be pleased with the rule, especially the regulation of underlying hazardous constituents in decharacterized wastes, and the establishment of stringent treatment standards. In addition, environmental groups may be concerned that generators can continue to use process knowledge to identify underlying hazardous constituents and would prefer required testing.

The Regions and States may be concerned about the dual regulatory scheme that may be imposed on CWA and SDWA facilities that they will be primarily responsible for implementing and enforcing. They will, however, favor the mechanisms being proposed to defer to CWA limits for applicable RCRA constituents.